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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
DADA, BEEMNET W				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/500,152

Applicant(s)

KITANI, SATOSHI

Examiner

BEEMNET W. DADA

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21 is/are rejected.
7) ☒ Claim(s) 7, 11, 19 and 21 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date 11/05/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application.
6) ☐ Other: _____

DETAILED ACTION

Claims 1-21 are presented for examination.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on November 05, 2004 has been considered. The submission is in compliance with the provisions of 37 CFR 1.97. Form PTO-1449 is signed and attached hereto.

Oath/Declaration

The oath filed June 12, 2004 complies with all the requirements set forth in MPEP 602 and therefore is accepted.

Drawings

The drawings filed on June 12, 2004 are accepted.

Specification

The disclosure is objected to because of the following informalities:

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Appropriate correction is required.

Claim Objections

Claims 7, 11, 19 and 21 are objected to because of the following informalities:

Claims 7 and 11 recite the limitation "the encrypted second information". There is insufficient antecedent basis for this limitation in the claim.

Claims 19 and 21 recites the phrase "information that can be defined". It is not clear whether the information is actually defined or not.

Claims 19 and 21 recites the terms "each stamper" and "each content". It is not clear what/which stamper and content the terms are referring to.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-21 are directed to a recording, reproducing and/or data processing apparatus. The examiner respectfully asserts that the claimed subject matter does not fall within the statutory classes listed in 35 USC 101. Claims 1, 6, 8, 13, 15, 18, 19 and 21 recite a recording, reproducing and/or data processing apparatus defined in the specification to be implemented through software (see specification page 15, lines 16-20, which recites recorder (recording) and player (reproducing) are software and pages 20, line 24-page 21, line 4, which recites host (data processing apparatus) as a software) therefore, the recited claims are directed to functional descriptive material. Generally functional descriptive material (i.e., software) is statutory when it is stored on a tangible computer readable storage medium. Claims 1, 6, 8, 13, 15, 18, 19 and 21 are rejected as being directed to a functional descriptive material. Claims 2-5, 7, 9-12, 14, 16,

Art Unit: 2135

17 and 20 depend from claims 1, 6, 8, 13, 15, 18, 19 and 21 respectively and therefore are rejected under the same rationale.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 8 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kamibayashi et al. US 7,065,648 B1 (hereinafter Kamibayashi).

As per claim 1, Kamibayashi teaches a recording and reproducing apparatus, comprising:

at least one of a recording portion for recording encrypted data to a recording medium having first information that is unique thereto and a reproducing portion for reproducing encrypted data recorded on the recording medium (i.e., MC 13 of fig 3, identification (MID) recorded on the MC, and encrypted content stored in the MC, and reproducing/decrypting the encrypted data column 4, lines 46-49 and column 9, lines 53-62);

a storing portion for storing second information uniquely assigned to a valid electronic apparatus or valid application software (i.e., storing in secret area of MC, secret medium ID (SMID) which is also provided to a valid LCM 1 of fig 3, and PD 12 of fig 3, column 7, lines 31-50); and

a connecting portion for mutually authenticating a data processing apparatus for at least encrypting data or decrypting encrypted data with a key generated in accordance with both the first information unique to the recording medium and the second information stored in the storing portion (i.e., mutual authentication of the MC 13 and PD 12, based on generated key information using MID and SMID, column 10, lines 24-41).

As per claim 8, Kamibayashi teaches a data processing apparatus, comprising:

a connecting portion for mutually authenticating a recording and reproducing apparatus for at least recording encrypted data to a recording medium having second information uniquely assigned to only a valid electronic apparatus or valid application software and first information unique thereto or reproducing encrypted data therefrom (i.e., mutual authentication of the MC 13 and PD 12, based on generated key information using identification (MID) recorded on the MC and SMID which is provided to LCM 1 of fig 3, and PD 12 of fig 3, column 10, lines 24-41);
and

a processing portion for at least encrypting data or decrypting encrypted data with a key generated in accordance with both the first information unique to the recording medium and sent from the recording and reproducing apparatus through the connecting portion and the second information unique to the electronic apparatus or application software (encrypting/decrypting data using key generated based on MID and SMID, column 9, lines 1-62).

As per claim 15, Kamibayashi teaches a recording, reproducing, and processing system, comprising:

a recording and reproducing apparatus for at least recording encrypted data to a recording medium having first information that is unique thereto or reproducing encrypted data

Art Unit: 2135

recorded on the recording medium, the recording and reproducing apparatus having second information uniquely assigned to a valid electronic apparatus or valid application software (i.e., MC 13 of fig 3, identification (MID) recorded on the MC, and encrypted content stored in the MC, and reproducing/decrypting the encrypted data column 4, lines 46-49 and column 9, lines 53-62 and storing in secret area of MC, secret medium ID (SMID) which is also provided to a valid LCM 1 of fig 3, and PD 12 of fig 3, column 7, lines 31-50); and

a data processing apparatus for at least encrypting data or decrypting encrypted data with a key generated in accordance with both the second information at least stored in the recording and reproducing apparatus and the first information unique to the recording medium (encrypting/decrypting data using key generated based on MID and SMID, column 9, lines 1-62).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-7, 10-14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamibayashi et al. US 7,065,648 B1 in view of Akiyama et al US 5,805,699 (hereinafter Akiyama).

As per claim 6, Kamibayashi teaches a recording and reproducing apparatus, comprising:

at least one of a recording portion for recording encrypted data to a recording medium having first information that is unique thereto and a reproducing portion for reproducing encrypted data recorded on the recording medium (i.e., MC 13 of fig 3, identification (MID) recorded on the MC, and encrypted content stored in the MC, and reproducing/decrypting the encrypted data column 4, lines 46-49 and column 9, lines 53-62);

a storing portion for storing second information uniquely assigned to a valid electronic apparatus or valid application software (i.e., storing in secret area of MC, secret medium ID (SMID) which is also provided to a valid LCM 1 of fig 3, and PD 12 of fig 3, column 7, lines 31-50);

a connecting portion for mutually authenticating a data processing apparatus for at least encrypting data or decrypting encrypted data with a key generated in accordance with both the first information unique to the recording medium and the second information stored in the storing portion (i.e., mutual authentication of the MC 13 and PD 12, based on generated key information using MID and SMID, column 10, lines 24-41).

Kamibayashi further teaches a revoke processing portion for performing revocation with information sent from the data processing apparatus through at least the connecting portion (i.e., checking transferred device id, if it is registered in revocation list, column 10, lines 17-21).

Kamibayashi is silent on revoke processing portion for performing revocation with the second information sent from the data processing apparatus through at least the connecting portion and stored in the storing portion and the first information unique to the recording medium when the second information stored in the storing portion is not information unique to a valid electronic apparatus or valid application software.

In the same filed of endeavor, Akiyama teaches revoke processing portion for performing revocation with a second information sent from a data processing apparatus through

Art Unit: 2135

at least a connecting portion and stored in a storing portion and a first information unique to a recording medium when the second information stored in the storing portion is not information unique to a valid electronic apparatus or valid application software (i.e., revoke processing (enabling/disabling) copying of encrypted data, based on validation of recording medium unique id (IDk) and a second information assigned to application software (SIDi), column 6, lines 20-36). Both Kamibayashi and Akiyama are directed to secure processing of recorded data. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teachings of Akiyama within the system of Kamibayashi in order to further enhance security of the system.

As per claim 13, Kamibayashi teaches a data processing apparatus, comprising:

a storing portion for storing second information uniquely assigned to only a valid electronic apparatus or valid application software (i.e., storing in secret area of MC, secret medium ID (SMID) which is also provided to a valid LCM 1 of fig 3, and PD 12 of fig 3, column 7, lines 31-50);

a connecting portion for mutually authenticating a recording and reproducing apparatus for at least recording encrypted data to a recording medium having first information unique thereto and reproducing encrypted data recorded on the recording medium (i.e., mutual authentication of the MC 13 and PD 12, based on generated key information using MID and SMID, column 10, lines 24-41); and

a processing portion for at least encrypting data or decrypting encrypted data with a key generated in accordance with both the first information unique to the recording medium and the second information stored in the storing portion (encrypting/decrypting data using key generated based on MID and SMID, column 9, lines 1-62),

Kamibayashi further teaches a revoke processing portion for performing revocation with information sent from the data processing apparatus through at least the connecting portion (i.e., checking transferred device id, if it is registered in revocation list, column 10, lines 17-21).

Kamibayashi is silent on the second information stored in the storing portion is sent to the recording and reproducing apparatus that has a revoke processing portion for performing revocation when the second information stored in the storing portion is not information unique to a valid electronic apparatus or valid application software..

In the same filed of endeavor, Akiyama teaches revoke processing portion for performing revocation with a second information sent from a data processing apparatus through at least a connecting portion and stored in a storing portion and a first information unique to a recording medium when the second information stored in the storing portion is not information unique to a valid electronic apparatus or valid application software (i.e., revoke processing (enabling/disabling) copying of encrypted data, based on validation of recording medium unique id (IDk) and a second information assigned to application software (SIDi), column 6, lines 20-36). Both Kamibayashi and Akiyama are directed to secure processing of recorded data. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teachings of Akiyama within the system of Kamibayashi in order to further enhance security of the system.

As per claim 18, Kamibayashi teaches a recording, reproducing, and processing system, comprising:

a recording and reproducing apparatus for storing second information uniquely assigned to only a valid electronic apparatus or valid application software and at least recording encrypted data to a recording medium having first information unique thereto or reproducing

encrypted data recorded on the recording medium (i.e., MC 13 of fig 3, identification (MID) recorded on the MC, and encrypted content stored in the MC, and reproducing/decrypting the encrypted data column 4, lines 46-49 and column 9, lines 53-62 and storing in secret area of MC, secret medium ID (SMID) which is also provided to a valid LCM 1 of fig 3, and PD 12 of fig 3, column 7, lines 31-50); and

a data processing apparatus for encrypting data or decrypting encrypted data with a key generated in accordance with both the second information stored in the recording and reproducing apparatus and the first information unique to the recording medium (encrypting/decrypting data using key generated based on MID and SMID, column 9, lines 1-62),

Kamibayashi further teaches a revoke processing portion for performing revocation with information sent from the data processing apparatus through at least the connecting portion (i.e., checking transferred device id, if it is registered in revocation list, column 10, lines 17-21).

Kamibayashi is silent on wherein the data processing apparatus is configured to send the second information stored in the storing portion thereof to the recording and reproducing apparatus having a revoke processing portion for performing revocation when the second information stored in the recording and reproducing apparatus is not information unique to a valid electronic apparatus or valid application software.

In the same filed of endeavor, Akiyama teaches revoke processing portion for performing revocation with a second information sent from a data processing apparatus through at least a connecting portion and stored in a storing portion and a first information unique to a recording medium when the second information stored in the storing portion is not information unique to a valid electronic apparatus or valid application software (i.e., revoke processing (enabling/disabling) copying of encrypted data, based on validation of recording medium unique id (IDk) and a second information assigned to application software (SIdi), column 6, lines 20-

36). Both Kamibayashi and Akiyama are directed to secure processing of recorded data. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teachings of Akiyama within the system of Kamibayashi in order to further enhance security of the system.

As per claims 3-5, 10, 12, 16 and 17, Kamibayashi teaches the apparatus as indicated above. Kamibayashi further teaches a revoke processing portion for performing revocation with information sent from the data processing apparatus through at least the connecting portion (i.e., checking transferred device id, if it is registered in revocation list, column 10, lines 17-21), and wherein a connecting portion is configured to send the second information stored in the storing portion to the data processing apparatus in encrypted form [column 7, lines 31-50].

Kamibayashi is silent on revoke processing portion for performing revocation with the second information sent from the data processing apparatus through at least the connecting portion and stored in the storing portion and the first information unique to the recording medium when the second information stored in the storing portion is not information unique to a valid electronic apparatus or valid application software.

In the same filed of endeavor, Akiyama teaches revoke processing portion for performing revocation with a second information sent from a data processing apparatus through at least a connecting portion and stored in a storing portion and a first information unique to a recording medium when the second information stored in the storing portion is not information unique to a valid electronic apparatus or valid application software (i.e., revoke processing (enabling/disabling) copying of encrypted data, based on validation of recording medium unique id (IDk) and a second information assigned to application software (SIDi), column 6, lines 20-36). Both Kamibayashi and Akiyama are directed to secure processing of recorded data. It

Art Unit: 2135

would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teachings of Akiyama within the system of Kamibayashi in order to further enhance security of the system.

As per claims 7 and 11 Kamibayashi further teaches decrypting means for decrypting encrypted second information [column 10, lines 29-49].

As per claim 14, Kamibayashi further teaches connecting portion is configured to send the second information stored in the storing portion to the data processing apparatus in encrypted form [column 7, lines 31-50].

Allowable Subject Matter

Claims 2 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and further rewritten to overcome the 35 USC 101 rejections indicated above.

Claims 19-21 would be allowable if applicant overcomes the claim objections and 35 USC 101 rejections indicated above.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 19-20, the art on record does not disclose, teach or fairly suggest storing third information that is defined for each encrypting unit, and identification data that is unique to each stamper and a calculating portion for obtaining intermediate key information unique to each recording medium in accordance with the first information, the fourth information, the second information, and the identification data when the revoke processing portion has

determined that the fourth information is information unique to a valid electronic apparatus or valid application software.

With respect to claim 21, the art on record does not disclose, teach or fairly suggest storing third information that is defined for each encrypting unit, and identification data that is unique to each stamper and the intermediate key information being generated in accordance with the first information, the fourth information, the second information, and the identification data having encrypted with a bus key generated when the authentication has been successful.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEEMNET W. DADA whose telephone number is (571)272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/500,152

Page 14

Art Unit: 2135

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Art Unit 2135

March 13, 2008